

What is claimed is:

1. An air conditioner comprising an outdoor unit and an indoor unit provided with an indoor heat exchanger and an indoor expansion device,

5 wherein the outdoor unit comprises:

a compressor for compressing a refrigerant;

an outdoor heat exchanger for heat-exchanging a refrigerant;

a four-way valve adjacently arranged to the compressor for circulating a refrigerant discharged from the compressor according to a heating cycle or a cooling cycle;

a refrigerant detouring path for detouring a refrigerant discharged from the outdoor heat exchanger to the compressor at the time of a defrosting operation;

an outdoor expansion device installed in the middle of the detouring path for reducing a pressure of a refrigerant which flows in the refrigerant detouring path; and

a heat exchanging device installed in the middle of the detouring path for heat-exchanging between a refrigerant introduced from the outdoor expansion device and a refrigerant discharged from the compressor.

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2. The air conditioner of claim 1, wherein the heat exchanging device comprises:

an inlet portion for introducing a refrigerant from the four-way valve;

a heat exchanging portion extending from the inlet portion with an expanded volume and for accommodating the refrigerant detouring path therein; and

an outlet portion for discharging a refrigerant which has passed through the heat exchanging portion to the outdoor heat exchanger.

3. The air conditioner of claim 2, wherein the refrigerant detouring path accommodated in the heat exchanging portion of the heat exchanging device is formed as a curved pipe.

4. The air conditioner of claim 1, wherein the refrigerant detouring path is connected to a first refrigerant path for connecting the outdoor heat exchanger and the indoor unit by a first three-way valve, and connected to a second refrigerant path for connecting the four-way valve and the indoor unit by a second three-way valve.

5. The air conditioner of claim 4, further comprising a receiver for temporarily receiving a refrigerant and a drier for removing moisture included in a refrigerant between the first refrigerant path and the first three-way valve.

6. The air conditioner of claim 1, wherein a plurality of the outdoor units are arranged in parallel.

7. The air conditioner of claim 1, wherein the outdoor expansion device is an electron expansion valve.

8. An outdoor unit for an air conditioner comprising:
5 a compressor;
an outdoor heat exchanger for heat-exchanging a refrigerant with external air;

a four-way valve adjacently arranged to the compressor for circulating a refrigerant according to a heating cycle or a cooling cycle;

10 a first refrigerant path for connecting the outdoor heat exchanger to an indoor unit;

a second refrigerant path for connecting the four-way valve to the indoor unit;

a refrigerant detouring path connected to the first refrigerant path by a first three-way valve and connected to the second refrigerant path by a second three-way valve for detouring a refrigerant at the time of a defrosting cycle;

an outdoor expansion device installed in the middle of the refrigerant detouring path for lowering a pressure of a refrigerant which flows in the refrigerant detouring path; and

20 a heat exchanging device installed between the outdoor expansion device and the second three-way valve, for heat-exchanging a refrigerant discharged from the compressor and a refrigerant which has passed through the outdoor expansion device.

9. The outdoor unit of claim 8, wherein the heat exchanging device comprises:

an inlet portion for introducing a refrigerant from the four-way valve;

5 a heat exchanging portion extending from the inlet portion with an expanded volume and for accommodating the refrigerant detouring path therein; and

an outlet portion for discharging a refrigerant which has passed through the heat exchanging portion to the outdoor heat exchanger.

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10. The outdoor unit of claim 8, further comprising an accumulator arranged between at an outlet of the four-way valve and an inlet of the compressor for filtering a liquefied refrigerant.